Supporting Information File

Genome-wide RNAi screen identifies regulators of cardiomyocyte necrosis

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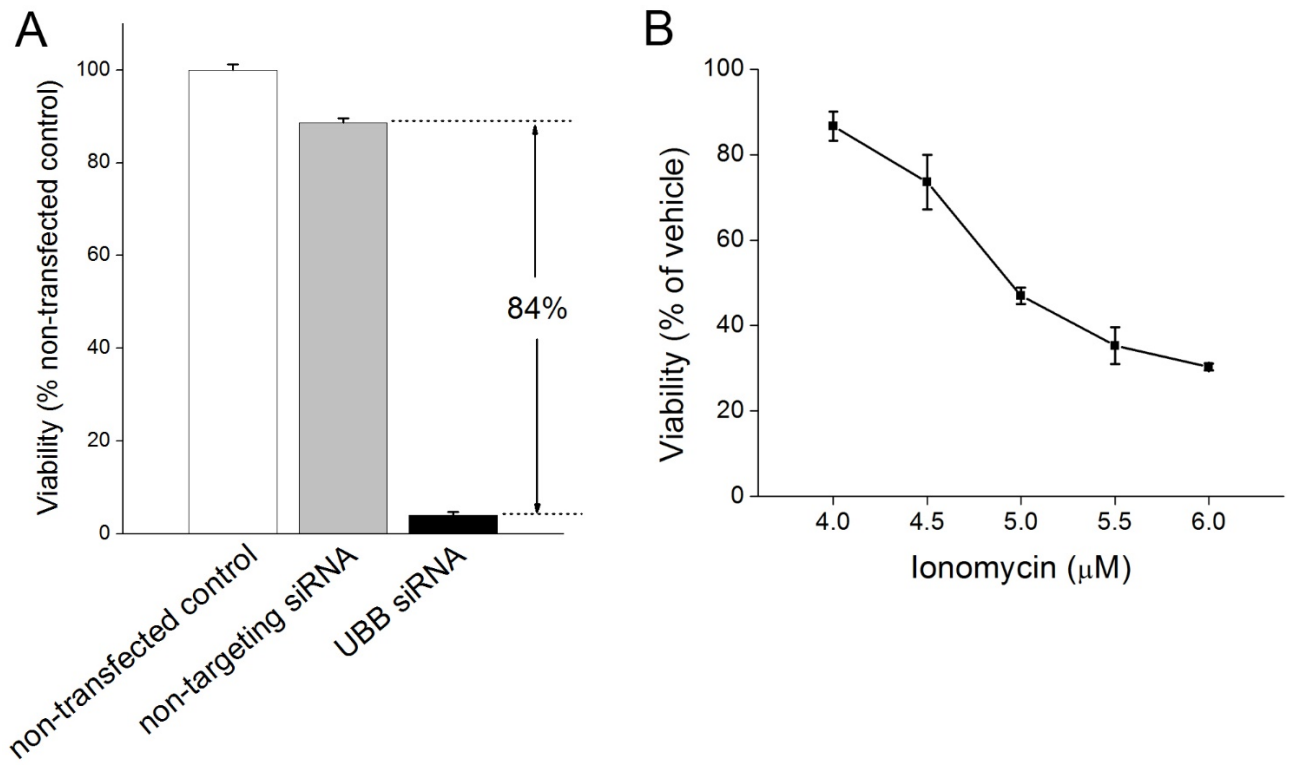

Figure S1. Optimization of siRNA transfection and ionomycin treatment for the primary and secondary screens. (**A**) Human bronchial smooth muscle cells (HuBrSMCs) were transfected with non-targeting siRNA or ubiquitin B (UBB) siRNA, and cell viability was measured using CellTiter-Glo luminescent assay reagent. (**B**) HuBrSMCs were treated with various doses of ionomycin, and cell viability was measured using CellTiter-Glo luminescent assay reagent.

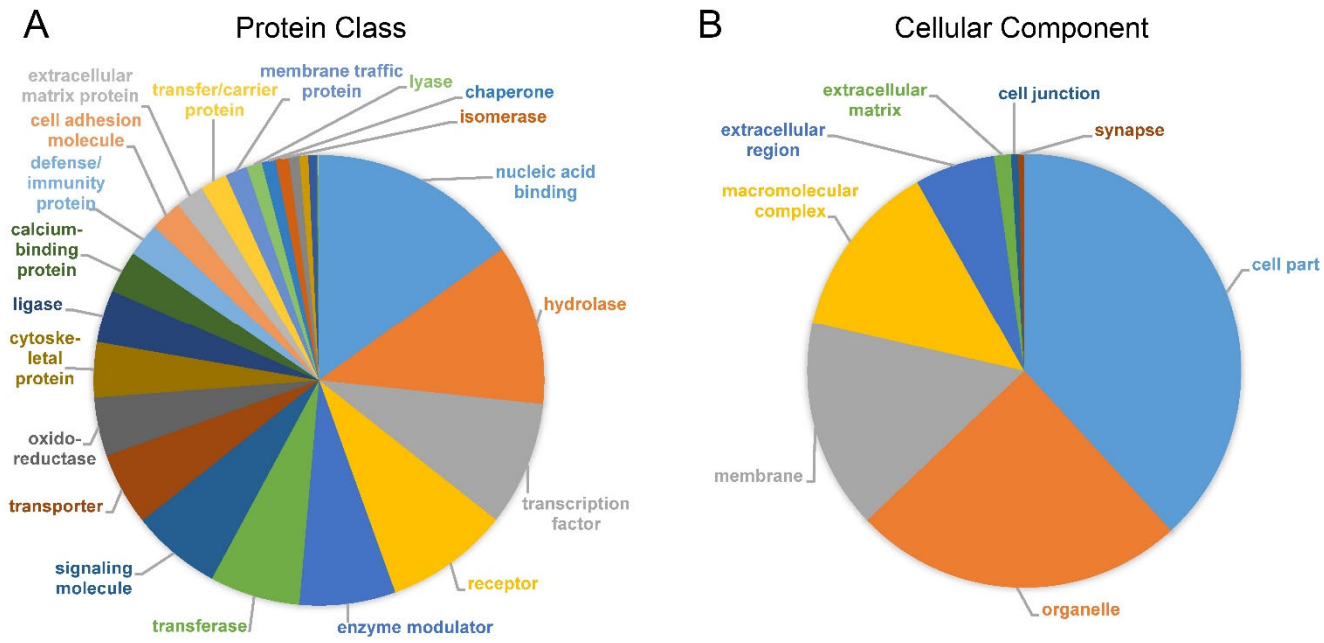

Figure S2. Classification and cellular localization of proteins crucial for ionomycin-induced necrosis. Top ranked candidate proteins in the primary screen were analyzed using the PANTHER database and grouped into protein class (A) and cellular component (B).

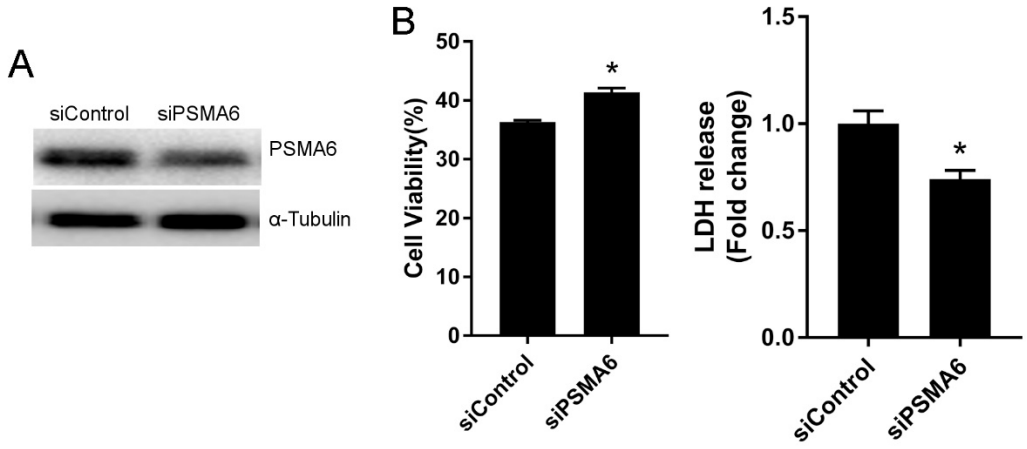

Figure S3. Knockdown of PSMA6 suppresses ionomycin-induced necrosis in primary neonatal rat cardiomyocytes. (**A**) NRCMs were transfected with control (siControl) or PSMA6 siRNA (siPSMA6). Knockdown efficiency was assessed by Western blotting; (**B**) NRCMs transfected with siControl or siPSMA6 were incubated with ionomycin (1μM) for 1h (n=3). Cell viability and LDH release was analyzed by MTT and LDH assays, respectively. * P<0.05 vs. siControl.